

Results

Crash Reductions (Using 6.83 Year Before and After Periods)

Total Crashes:	88.9% Reduction	(From 18 crashes to 2 crashes)
Target Crashes*:	100.0% Reduction	(From 17 crashes to 0 crashes)
Target Injury Crashes:	100.0% Reduction	(From 12 crashes to 0 crashes)
Target PDO Crashes:	100.0% Reduction	(From 5 crashes to 0 crashes)
AADT:	30.4% Increase	(From 2300 vehicles to 3000 vehicles)

\* Target Crashes include all Lane Departure Crash Types during Wet road conditions.

The Treatment Location appears to have had a substantial decrease in both Total and Target Crashes from the before to the after period. Resurfacing the pavement in the curve appears to have had a dramatic reduction in the number and severity of Run-Off-Road Crashes. After the pavement was wedged and overlaid with skid-resistant materials, no wet crashes were reported in the after period.

Location Photo Taken on June 13, 2005



For the complete project evaluation report and reports on other projects, please go to:  
<http://www.ncdot.org/doh/preconstruct/traffic/Safety/ses/projects/completed.html>

North Carolina Department of Transportation  
Traffic Engineering and Safety Systems Branch  
Traffic Safety Systems Management Section  
Safety Evaluation Group

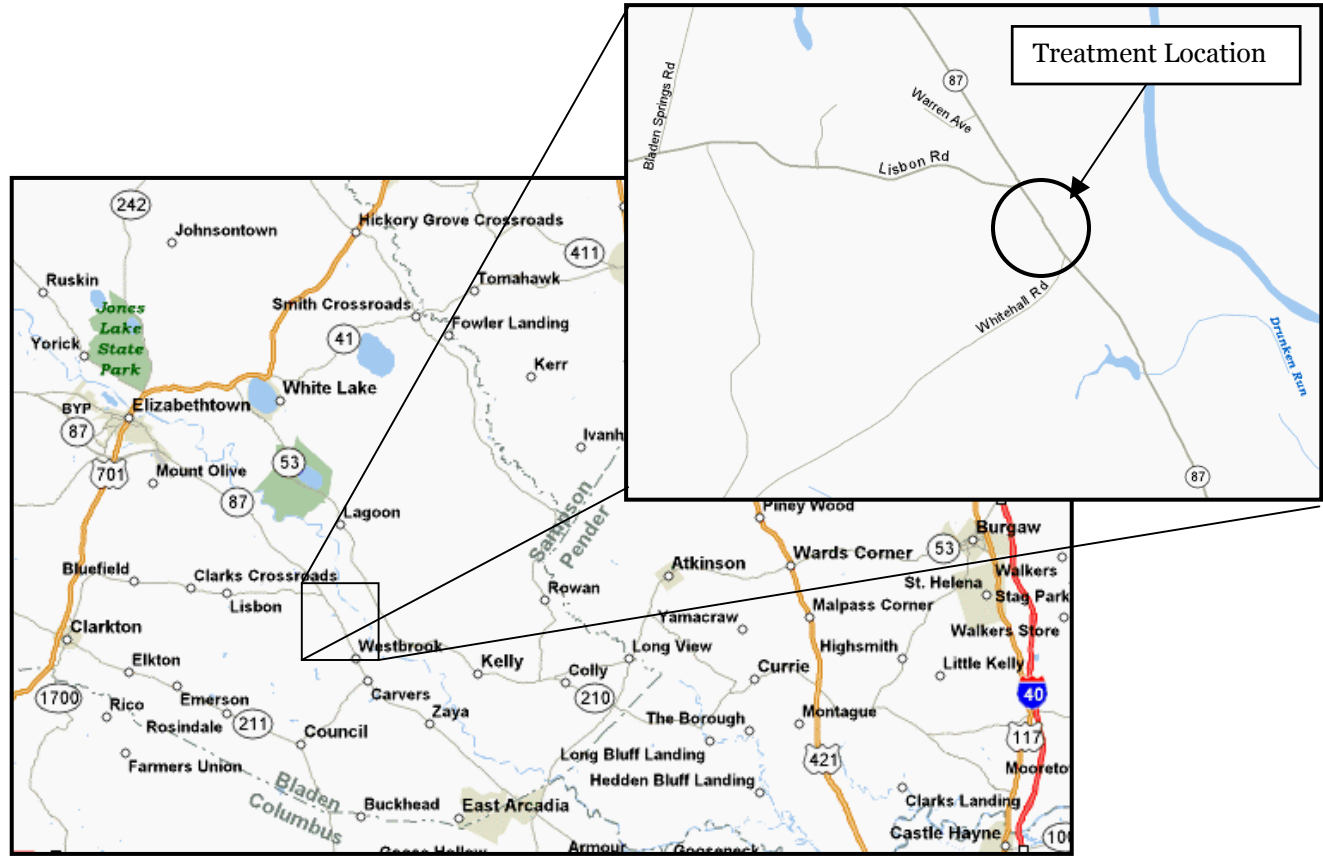
Evaluation of Spot Safety Project # 06-94-201

The Pavement Resurfacing and Curve Wedging on NC 87  
Located 0.5 miles southeast of SR 1712 (Lisbon Road)  
In Bladen County

The subject location is located in a rural area south of Elizabethtown. Traffic Engineering staff originally recognized this location as needing safety improvements because it had experienced 18 Total Crashes in the time period between January 1, 1987 through June 30, 1994. Of these, 15 crashes were Run-Off-Road Crashes and 17 crashes occurred during wet road conditions. The Total Crashes resulted in two fatalities, five class-A injuries, five class-B injuries, and 15 class-C injuries.

The spot safety project improvement consisted of wedging and overlaying the pavement through a curved section on NC 87. The safety improvements were intended to alleviate the wet roadway lane departure crash pattern by improving drainage on the road and providing more skid resistance. The curve wedging was designed to provide proper superelevation throughout the curve in order to better guide motorists through this section of roadway.

The project was completed on December 22, 1997 at an estimated cost of \$40,000.

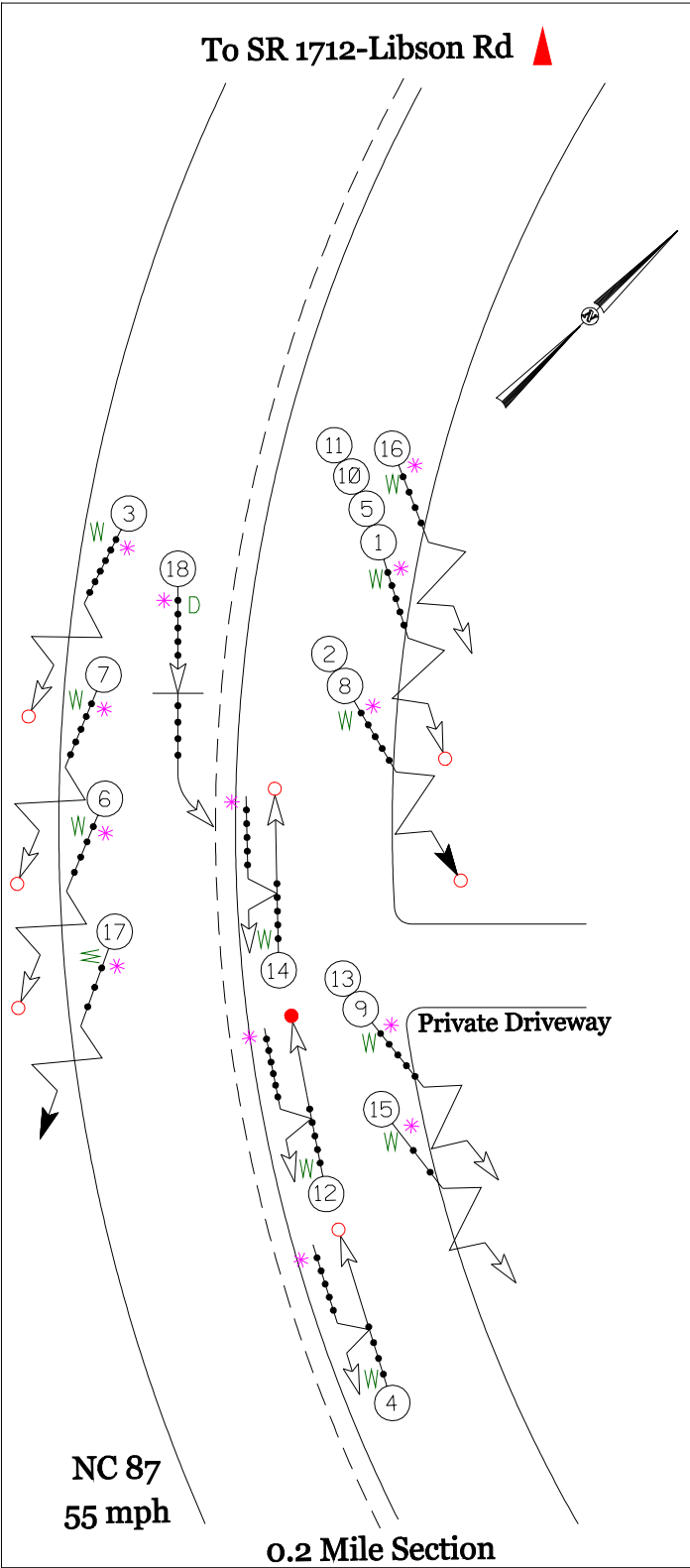


# Before Period Collision Diagram

January 1, 1991 through October 31, 1997  
(6.83 Years of Crash Data)  
1994 ADT = 2300

- 18 Total Crashes
- 14 Run Off Road Crashes
- 3 Sideswipe Crashes
- 1 Rear End Crash
- 17 Target Crashes\*
- 1 Target Fatal Injury Crash
- 11 Target Non-Fatal Injury Crashes
- 5 Target PDO Crashes

\* Target Crashes are deemed correctable by the treatment. For this evaluation, Target Crashes include:  
Lane Departure Crash Types  
During Wet Road Conditions



# After Period Collision Diagram

March 1, 1998 through December 31, 2004  
(6.83 Years of Crash Data)  
2001 ADT = 3000

- 2 Total Crashes
- 1 Left Turn-Different Roadway Crash
- 1 Animal Crash
- 0 Target Crashes\*

